امتحانات رقم (1)

الترم الثانى

ذاكرولى

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Five Sample Tests
٥ اختبارات على المنهج بالكامل

Sample Test 1

1 **Choose the correct answer from a, b, c or d.**

1. .... is from artificial intelligence applications in our daily life.
   - a. Personal assistant
   - b. Smart shopping
   - c. Smart cars
   - d. All of them

2. In robot device .... is considered the senses of a robot just as eyes and ears.
   - a. structure
   - b. motors
   - c. sensors
   - d. controller

3. The Block "Go to Random Position" in Scratch program is used to................ .
   - a. move sprite to specific position
   - b. move the sprite in a random motion
   - c. hide sprite
   - d. delete sprite

4. .... is an understandable language and it use words similar to english.
   - a. Python
   - b. Java
   - c. C#
   - d. C++

5. .... is a function that is used to display text, values on screen.
   - a. Type ( )
   - b. Print ( )
   - c. Editor
   - d. Python shell

2 **Complete the following sentences with the appropriate words in brackets.**

(Signal Conversion – Software – sprites – Super AI – Save to your computer)

1. The most advanced artificial intelligence is ....
2. The second step of sensor device work is ....
3. .... is what makes a robot smart and determine how it responds to information.
4. To save your project in Scratch program select .... from file menu.
5. In Scratch program you can hide / show sprite from .... area.

3 **Put (✓) in front of the correct sentence and (✗) in front of the wrong one.**

1. You can change the sprite movement direction by move command. ( )
2. Scratch program doesn't enhance collaboration skills or creative thinking. ( )
3. The controller is the brain of the robot, processing the data collected by sensors and issuing command to motors. ( )
4. The first step of the sensor device work is displaying the results. ( )
5. The artificial intelligence needs a huge amount of information. ( )

Sample Test 2

1 Choose the correct answer from a, b, c or d.

1. .... sensors device help cars to determine the distance to other cars.
   a. Sound   b. Visible light   c. Infrared   d. Distance

2. To add a new sprite click on ....
   a. choose sprite   b. Stage   c. when ⚑ clicked   d. Motion

3. .... is a device that can be programmed to perform tasks automatically.
   a. Sensor   b. Scratch   c. Robot   d. Python

4. Robot help in dangerous tasks like ....
   a. cleaning house   b. transportation system
   c. agricultural watering
   d. heavy weights and hazardous chemicals

5. Applications of artificial intelligence in our daily life like ....
   a. smart shopping   b. personal assistance
   c. Both (a , b)   d. none of them

2 Complete the following sentences with the appropriate words in brackets.

(Choose a sprite – add or delete sprite – integer (int) – Super AI – picking up information)

1. In Python language X = 5 The variable X data type is ....
2. In Scratch program to add a new sprite click on .... from sprite area.
3. In Scratch program from sprite area you can ....
4. The main job of the sensor device is ....
5. The most advanced artificial intelligence is ....

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. Sensors devices help robot to learn new languages.   (   )
2. Software is the robot component which affect its weight and its ability to move.   (   )
3. You can download Scratch program freely from its official website.   (   )
4. In Scratch program you can change the sprite movement direction from move command.

                                                                                          (   )
5. Python language is used to develop web and artificial intelligence application.   (   )

إهداء من سلسلة كتب المعاصر في ICT غير مخصصة للبيع

1 Choose the correct answer from a, b, c or d.

1. In Python language variable data type which is used to store names and addresses is ....
   a. number   b. booleans   c. string   d. nothing

2. In Scratch program the area which is used to add sprite is ....
   a. stage   b. sprites   c. blocks   d. script

3. There are many types of robots like ....
   a. industrial   b. home   c. medical   d. all of them

4. The first step of the sensor device is ....
   a. sensing   b. converting   c. display results   d. nothing

5. There are many applications of the artificial intelligence in our daily life like ....
   a. personal assistant b. smart cars   c. smart shopping   d. all of them

2 Complete the following sentences with the appropriate words in brackets.

(Educational program – sprites – Safety – Distance Sensors – machine language translator)

1. The sensor device type which used to avoid collisions ....

2. .... and employment are challenges facing robots technology.

3. Natural language processing is like .... as it understands human language.

4. .... is from Scratch program features.

5. From .... area sprites can be shown/ hidden.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. Robots and Machine learning are from Artificial intelligence field.   (   )

2. Distance sensors are used to avoid surrounding obstacles and collisions.   (   )

3. Python language is considered from the most difficult programming language.   (   )

4. Robots doesn't need software in its work.   (   )

5. The main job of sensors devices is picking up the environment changes and convert it to signals.   (   )

إهداء من سلسلة كتب المعاصر في ICT غير مخصصة للبيع

Sample Test 4

1 Choose the correct answer from a, b, c or d.

1. The interactive Python interface is ....
   a. Booleans   b. Editor   c. Python Shell   d. string

2. In Scratch program from sprites area you can ....
   a. add sprite   b. change sprite name
   c. delete sprite   d. all of them

3. From Scratch program features all the following except ....
   a. allow learning the complex code   b. a learning program
   c. simple interface   d. free program

4. The most advanced artificial intelligence is ....
   a. narrow   b. super   c. general   d. none of them

5. The inferared sensors devices are used in ....
   a. remote controls   b. non-contact thermometers
   c. both (a and b)   d. none of them

2 Complete the following sentences with the appropriate words in brackets.

(print ( ) – structure – motors – Infrared Sensors – Sprites)

1. .... is considered the robot device muscles.

2. In Scratch program .... area is used to add and delete sprite.

3. In Python language .... function is used to display text and values on screen.

4. The main part of the robot which carry all its components is ....

5. .... is used to measure temperature without direct contact.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. The data type for the variable (school) in school = "Salam" is text.   (   )

2. Python language cannot be integrated with any programming language.   (   )

3. You can delete a sprite of stage from sprite area.   (   )

4. Scratch program is considered a difficult program to learn.   (   )

5. The artificial intelligence is just only one type.   (   )

إهداء من سلسلة كتب المعاصر في ICT غير مخصصة للبيع

1 Choose the correct answer from a, b, c or d.

1. .... is from artificial intelligence applications in our daily life.
   a. Smart games
   b. Digital Doctors
   c. Instant translator
   d. All the them

2. .... Sensor devices are used to pick up images and videos.
   a. Sound
   b. Touch
   c. Light
   d. Vision

3. Scratch program helps student in ....
   a. learning principles of programming
   b. develop collaboration skills
   c. both (a , b)
   d. none of them

4. Which of the following variables is a text type ....
   a. City = "Cairo"
   b. Y = 10
   c. X = 3.5
   d. is - student-success = True

5. Python language can be integrated with other language like ....
   a. C #
   b. C + +
   c. Java
   d. all of them

2 Complete the following sentences with the appropriate words in brackets.

(Develop web applications – software – print ( ) – Motors – Save to your computer)

1. The responsible robot part of moving its components is ....

2. .... is what make a robot smart and determine how it responds.

3. In Scratch program to save your project which you create it from file menu select ....

4. You can use Python language in ....

5. .... is a function used to display text and values on screen in Python language.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. In Python language text variables values are placed between single quotes ' '
   or double " ".   (   )

2. General artificial intelligence focuses in work on performing a specific task.   (   )

3. Infrared sensors devices is used in remote controls.   (   )

4. In Scratch program the symbol (icon) 🖰 is used to execute the project.   (   )

5. Robot device pick up sounds using visible sensors.   (   )

Ten Sample Tests

Test 1

1 **Choose the correct answer from a, b, c or d.**

1. .... sensors device help cars to determine the distance to other cars.
   a. Sound   b. Visible light   c. Infrared   d. Distance

2. To add a new sprite click on ....
   a. choose sprite   b. Stage   c. when 🚩 clicked   d. Motion

3. .... is a device that can be programmed to perform tasks automatically.
   a. Sensor   b. Scratch   c. Robot   d. Python

4. Robot heip in dangerous tasks like ....
   a. cleaning house   b. transportation system
   c. agricultural watering
   d. heavy weights and hazardous chemicals

5. Applications of artificial intelligence in our daily life like ....
   a. smart shopping   b. personal assistance
   c. Both (a , b)   d. none of them

2 **Complete the following sentences with the appropriate words in brackets.**
(Educational program – sprites – Safety – Distance Sensors – machine language translator)

1. The sensor device type which used to avoid collisions ....
2. .... and employment are challenges facing robots technology.
3. Natural language processing is like .... as it understands human language.
4. .... is from Scratch program features.
5. From .... area sprites can be shown/ hidden.

3 **Put (✓) in front of the correct sentence and (✗) in front of the wrong one.**

1. Robot device doesn't need to software in his work.   (   )
2. In Scratch program, the program section appear in stage area.   (   )
3. In Python language the variable type is known by using type ( ) function.   (   )
4. In Scratch program the sprite location is determined by the value of
   the horizontal axis X, the vertical axis Y.   (   )
5. The artificial intelligence is used in making smart games only.   (   )

Test 2

1 **Choose the correct answer from a, b, c or d.**

1. .... express reserved places in memory to store and save specific value.
   a. Variables   b. Constants   c. Functions   d. None of them

2. To add a new sprite in Scratch program ....
   a. sound   b. choose sprite   c. motion   d. say

3. In Scratch program interface there are areas like ....
   a. blocks   b. stage   c. sprites   d. all of them

4. Sensors which are in robot has a function, it is ....
   a. analyzing data   b. moving
   c. pick up information   d. sending commands

5. Artificial intelligence are used in medical field like ....
   a. develop games   b. analyzing data
   c. learning language   d. diagnose diseases

2 Complete the following sentences with the appropriate words in brackets.
   (Signal Conversion – Software – sprites – Super AI – Save to your computer)

1. The most advanced artificial intelligence is ....
2. The second step of sensor device work is ....
3. .... is what makes a robot smart and determine how it responds to information.
4. To save your project in Scratch program select .... from file menu.
5. In Scratch program you can hide / show sprite from .... area.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. Type ( ) function is used to know variable type in Python language.   (   )
2. The artificial intelligence is one type.   (   )
3. The robot is used in factories only.   (   )
4. In Scratch program you cannot share your works with your classmates.   (   )
5. To stop the project execution click on start.   (   )

Test 3

1 Choose the correct answer from a, b, c or d.

1. Challenges which face robots technology are ....
   a. safety   b. employment   c. ethics   d. all the them

2. To display text, variables and arithmetic operation results in Python language the function .... is used.
   a. print ( )   b. sin ( )   c. type ( )   d. none of them

3. The first step of sensor device work is ....
   a. transmission   b. display   c. sensing   d. conversion

4. From data type in Python language ....
   a. number   b. string   c. booleans   d. none of them

5. In Scratch program the block go to random position is used in ....
   a. move sprite a random movement   b. delete sprite
   c. move to a specific place   d. hide sprite

Part Two

2 Complete the following sentences with the appropriate words in brackets.

(perform work with high accuracy – X , Y – picking up information – Float – diagnose diseases)

1. Sensors in robot help in ....
2. Artificial intelligence help doctors to ....
3. In production line robot help in ....
4. In Scratch program the sprite location an stage is determined by the value of ....
5. The variable Z = 3.5 data type is ....

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. In Python language text variables values are placed between single quotes ' ' or double " ".
2. General artificial intelligence focuses in work on performing a specific task. ( )
3. Infrared sensors devices is used in remote controls. ( )
4. In Scratch program the symbol (icon) ▶ is used to execute the project. ( )
5. Robot device pick up sounds using visible sensors. ( )
( )
( )

Test 4

1 Choose the correct answer from a, b, c or d.

1. The interactive Python interface is ....
   a. Booleans   b. Editor   c. Python Shell   d. string
2. In Scratch program from sprites area you can ....
   a. add sprite   b. change sprite name
   c. delete sprite   d. all of them
3. From Scratch program features all the following except ....
   a. allow learning the complex code   b. a learning program
   c. simple interface   d. free program
4. The most advanced artificial intelligence is ....
   a. narrow   b. super   c. general   d. none of them
5. The inferared sensors devices are used in ....
   a. remote controls   b. non-contact thermometers
   c. both (a and b)   d. none of them

2 Complete the following sentences with the appropriate words in brackets.

(Download the program – print ( ) – Choose a sprite – NumPy – software)

1. In Python the function which is used to display text and variables is ....
2. .... is what make a robot smart and determine how robot respond to information it receive.
3. To create a project using Scratch program you have first to ....
4. Click on .... to create a new sprite in Scratch program.
5. .... is Python library which is used in statistics.

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3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. The data type for the variable (school) in school = "Salam" is text. ( )
2. Python language cannot be integrated with any programming language. ( )
3. You can delete a sprite of stage from sprite area. ( )
4. Scratch program is considered a difficult program to learn. ( )
5. The artificial intelligence is just only one type. ( )

Test 5

1 Choose the correct answer from a, b, c or d.

1. .... offer you suggestions for products that you might like.
   a. Instant translator   b. Machine learning
   c. Smart shopping   d. Smart games

2. Robotics technology is facing challenges like ....
   a. safety   b. employment   c. ethics   d. all of them

3. An area in Scratch program is called .... where the project appears in.
   a. Blocks   b. Script   c. Stage   d. Sprites

4. Python language is an .... language that it translate programming code line by line.
   a. interpreted   b. easy - to use   c. integrated   d. open source

5. In Python language the text value is placed between .... signs.
   a. " " double   b. ' ' single   c. both (a and b)   d. none of them

2 Complete the following sentences with the appropriate words in brackets.

(Pandas – Vision – Open source – type ( ) – start 🚩)

1. To know the type of the variable .... function is used in Python language.
2. In Python language .... library is used to analyze and process data.
3. .... is an icon used to view the executing of the project in Scratch program.
4. Robot devices use .... sensors to take (pick up) images, videos.
5. From Python language features that it is .... language.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. You can change the sprite movement direction by move command. ( )
2. Scratch program doesn't enhance collaboration skills or creative thinking. ( )
3. The controller is the brain of the robot, processing the data collected by sensors and issuing command to motors. ( )
4. The first step of the sensor device work is displaying the results. ( )
5. The artificial intelligence needs a huge amount of information. ( )

Test 6

1 Choose the correct answer from a, b, c or d.

1. .... is from artificial intelligence applications in our daily life.
   a. Personal assistant
   b. Smart shopping
   c. Smart cars
   d. All of them

2. In robot device .... is considered the senses of a robot just as eyes and ears.
   a. structure
   b. motors
   c. sensors
   d. controller

3. The Block "Go to Random Position" in Scratch program is used to.............. .
   a. move sprite to specific position
   b. move the sprite in a random motion
   c. hide sprite
   d. delete sprite

4. .... is an understandable language and it use words similar to english.
   a. Python
   b. Java
   c. C#
   d. C++

5. .... is a function that is used to display text, values on screen.
   a. Type ()
   b. Print ()
   c. Editor
   d. Python shell

2 Complete the following sentences with the appropriate words in brackets.

(sensing – Python Shell – machine language translator – Surgical robot – Stage)

1. The interactive Python interface is ....
2. .... is an area in Scratch program used to display project.
3. The sensor device first work step is ....
4. The natural language processing is like .... as it understand human language.
5. .... is a robot use sensors devices and help to perform surgeries.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. Robots and Machine learning are from Artificial intelligence field. ( )
2. Distance sensors are used to avoid surrounding obstacles and collisions. ( )
3. Python language is considered from the most difficult programming language. ( )
4. Robots doesn't need software in its work. ( )
5. The main job of sensors devices is picking up the environment changes and convert it to signals. ( )

Test 7

1 Choose the correct answer from a, b, c or d.

1. The motors in robot devices like ....
   a. electric
   b. pneumatic
   c. water (hydrous)
   d. both (a & b)

2. Challenges that facing robotics technology are.............. .
   a. increase independence on paper documents
   b. safety, employment, ethics
   c. increase independence on smartphone
   d. none of them

3. The text variable value are placed between .... sign.
   a. ' ' single or " " double quotes   b. < >
   c. > =   d. = <

4. Robots devices help in dangerous tasks like ....
   a. means of transportation   b. hazardous chemicals
   c. watering gardens   d. house cleaning

5. The last step of sensor device work is ....
   a. transmission   b. display results   c. sensing   d. conversion

2 Complete the following sentences with the appropriate words in brackets.

(print ( ) – structure – motors – Infrared Sensors – Sprites)

1. .... is considered the robot device muscles.
2. In Scratch program .... area is used to add and delete sprite.
3. In Python language .... function is used to display text and values on screen.
4. The main part of the robot which carry all its components is ....
5. .... is used to measure temperature without direct contact.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. Artificial intelligence doesn't need large amount of information.   (   )
2. Robots are used in factories only.   (   )
3. X axis and Y axis are used to identify the current sprite location on stage. (   )
4. Z = 10 The data type of the variable Z is integer number.   (   )
5. In Scratch program we can not add more than one sprite on Scratch stage.   (   )

Test 8

1 Choose the correct answer from a, b, c or d.

1. In Python language variable data type which is used to store names and addresses
   is ....
   a. number   b. booleans   c. string   d. nothing

2. In Scratch program the area which is used to add sprite is ....
   a. stage   b. sprites   c. blocks   d. script

3. There are many types of robots like ....
   a. industrial   b. home   c. medical   d. all of them

4. The first step of the sensor device is ....
   a. sensing   b. converting   c. display results   d. nothing

5. There are many applications of the artificial intelligence in our daily life like ....
   a. personal assistant   b. smart cars   c. smart shopping   d. all of them

2 **Complete the following sentences with the appropriate words in brackets.**
(Choose a sprite – add or delete sprite – integer (int) – Super AI – picking up information)

1. In Python language X = 5 The variable X data type is ....
2. In Scratch program to add a new sprite click on .... from sprite area.
3. In Scratch program from sprite area you can ....
4. The main job of the sensor device is ....
5. The most advanced artificial intelligence is ....

3 **Put (✓) in front of the correct sentence and (✗) in front of the wrong one.**

1. The general artificial intelligence focus on performing a specific task. ( )
2. Infrared sensors devices are usually used in remote controls devices. ( )
3. Challenges which face robotics technology are safety, employment and ethics. ( )
4. Scratch program is considered a difficult learning tool for many students. ( )
5. You can integrate Python language with another language like C # , C + + , Java. ( )

Test 9

1 **Choose the correct answer from a, b, c or d.**

1. .... is from artificial intelligence applications in our daily life.
   a. Personal assistant   b. Smart games   c. Smart cars   d. All of them

2. Features of Python language are ....
   a. open source
   b. interpreted language
   c. easy - to - use
   d. all of them

3. In Scratch Program you can change sprite size from its value in .... area.
   a. sprites   b. script   c. stage   d. blocks

4. Using robots in production lines leads to ....
   a. decrease efficiency and productivity
   b. doesn't improve production
   c. increase efficiency and productivity
   d. slow production

5. Sensors devices help robots to ....
   a. learning new languages
   c. slow its operations
   b. interacting with its environment
   d. none of them

2 **Complete the following sentences with the appropriate words in brackets.**
(Develop web applications – software – print ( ) – Motors – Save to your computer)

1. The responsible robot part of moving its components is ....
2. .... is what make a robot smart and determine how it responds.
3. In Scratch program to save your project which you create it from file menu select ....
4. You can use Python language in ....
5. .... is a function used to display text and values on screen in Python language.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. Natural language processing is like intelligent language translator. ( )
2. It is not allowed that variable name begins with underscore - sign. ( )
3. (X , Y) axis are used to determine the sprite location on stage. ( )
4. To execute your project in Scratch program click on ⚑ icon. ( )
5. The main job of the sensor devices is producing sound. ( )

Test 10

1 Choose the correct answer from a, b, c or d.

1. .... is from artificial intelligence applications in our daily life.
   a. Smart games   b. Digital Doctors
   c. Instant translator   d. All the them

2. .... Sensor devices are used to pick up images and videos.
   a. Sound   b. Touch   c. Light   d. Vision

3. Scratch program helps student in ....
   a. learning principles of programming   b. develop collaboration skills
   c. both (a , b)   d. none of them

4. Which of the following variables is a text type ....
   a. City = "Cairo"   b. Y = 10
   c. X = 3.5   d. is - student-success = True

5. Python language can be integrated with other language like ....
   a. C #   b. C + +   c. Java   d. all of them

2 Complete the following sentences with the appropriate words in brackets.

(Motors – open source – Narrow & Super – print ( ) – Surgical robot)

1. In Python language .... function is used to display text, results on screen.
2. Features of Python language are ....
3. .... is considered as robot muscles.
4. Artificial intelligence type are ....
5. .... is a device which uses sensor devices to perform surgeries operations.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. Sensors devices help robot to learn new languages. ( )
2. Software is the robot component which affect its weight and its ability to move. ( )
3. You can download Scratch program freely from its official website. ( )
4. In Scratch program you can change the sprite movement direction from move command. ( )
5. Python language is used to develop web and artificial intelligence application. ( )

خطوة 2
اختيار اسم الطابعة بتاعتك

خطوة 3
كتابة الصفحات المراد طباعتها
نكتب رقم 4 ثم نكتب الشرطة دي - ثم نكتب 9

خطوة 4
اختيار نوع الورق

خطوة 1

خطوة 5
اختيار A4

خطوة 6

امتحانات رقم (2)

الترم الثاني

Model Exam 1

1 Choose the correct answer:

1 The function .... is used to display texts or values on the output screen

    a. cos ( )   **b.** type ( )   **c.** print ( )   **d.** sin ( )

2 📖 In Scratch program, to add a sound effect to the sprite, use the command ....

    a. Repeat   **b.** Looks

    c. Play Sound   **d.** Choose a Backdrop

3 Narrow AI focuses on ....

    a. multiple tasks   **b.** specific tasks

    c. human-like tasks   **d.** all tasks

4 .... help cars determine the distance to other vehicles.

    a. Sound sensors   **b.** Distance sensors

    c. Infrared sensors   **d.** Special sensors

5 📖 To stop the execution of the project, click the .... icon.

    a. 🚩   **b.** 🔴

    c. 📣   **d.** S

2 Put (✓) or (✗):

1 The texts of variables are placed between single quotation marks ' ' or double quotation marks " ".   (   )

2 📖 Artificial intelligence can learn new things slowly.   (   )

3 Sensors play a role in the movement of robots and sensing their surrounding environment.   (   )

4 Only one sprite can be added to the platform. (   )

5 Python is a free and open-source language that does not allow anyone to develop it. (   )

3 **Complete the following sentences:**

1 To repeat a set of commands 10 times in the Scratch program, use the .... block from the Control group.

2 Python .... are pre-built codes and functions that help programmers perform specific tasks.

3 Robots use communication tools, such as ...., to interact with users or other robots.

4 To execute a Scratch project, click on the .... icon.

5 .... are used in robots to move their parts, such as robotic arms or wheels.

Model Exam 2

1 **Choose the correct answer:**

1 The text value of the variable is placed between the signs ....
   a. "" **b.** <> **c.** ' ' **d.** both a and c

2 The Scratch program features include ....
   a. that it's a free program
   b. developing creative thinking
   c. enhancing problem solving skills
   d. both b and c

3 .... are used to avoid obstacles.
   a. Light sensors **b.** Sound sensors
   c. Distance sensors **d.** Heat sensors

4 📖 In Scratch, to repeat the sprite's movement, we use the ....
   a. Start **b.** Choose Sprite
   c. command Blocks Area **d.** Stop

5 .... is the main purpose of the signal conversion step in sensors.

    a. Displaying the results

    b. Sending the signals to another device

    c. Converting the information into electrical signals

    d. Turning off the sensor

2 Put (✓) or (✗):

1 To know the type of the variable, we use the print ( ) function.   (   )

2 📖 Self-driving cars rely entirely on artificial intelligence.   (   )

3 The sprite can be deleted from the platform.   (   )

4 📖 The first step in the operation of the sensor device is signal conversion.

                                                                           (   )

5 Smart games are used to make playing games more fun.   (   )

3 Arrange the following robot components in the order they interact when a robot is performing a task:

1 (   ) The sensors detect information.

2 (   ) The controller processes the data collected from the sensors.

3 (   ) The motors execute commands.

4 (   ) The power source provides energy.

Model Exam 3

1 Choose the correct answer:

1 The benefits of using robots in industry include ....

    a. decreasing human errors   **b.** improving productivity

    c. reducing accuracy   **d.** both a and b

2 📖 Robots assist in dangerous tasks, such as ....

    a. transportation and comunication

    b. handling heavy weights and hazardous chemicals

    c. irrigating gardens and parks   **d.** cleaning the house

3 Machine learning means ....

    a. understanding Languages   **b.** seeing the world

    c. learning from mistakes   **d.** deep learning

4 Scratch uses a visual interface based on ....

    a. menus   **b.** texts

    c. icons   **d.** blocks

5 .... are used for non-contact temperature measurement.

    a. Ultrasonic sensors   **b.** Infrared sensors

    c. Light sensors   **d.** Motion sensors

2 Put (✓) or (✗):

1 In Is_taher_student = False, the statement type of the variable Is_taher_ student is logical.   (   )

2 📖 In Scratch, the student needs to write a lot of complex codes. (   )

3 Medical robots help doctors perform surgeries.   (   )

4 AI can look at a picture and tell you everything in it, which is called Computer Vision.   (   )

5 📖 The design of the structure affects the weight of the robot and its ability to move.   (   )

3 Correct the underlined words:

1 <u>Sound sensors</u> help robots avoid collisions by measuring the distance to obstacles.   (.............................)

2 <u>Narrow AI</u> is a type of AI that can perform any task a human can do.

   (.............................)

3 The <u>Pen up</u> block is used to draw a line in Python.   (.............................)

4 <u>Scratch</u> is a versatile language, meaning it is used for web development, AI, and game programming. (...............................)

5 The <u>type ( )</u> function in Python is used to display text or values on the output screen. (...............................)

Model Exam 4

1 Choose the correct answer:

1 The challenges facing robotics technology include ....

    a. an increased reliance on paper documents

    b. an increased reliance on smartphones

    c. safety, employment, and ethics

    d. an increased reliance on traditional machines

2 📖 If the movement is too fast, the command .... from Control Blocks is used.

    a. Wait   b. Repeat   c. Forever   d. Else

3 📖 A/An ...., like Siri or Alexa, use artificial intelligence to understand and execute your commands.

    a. personal assitant   b. instant translator

    c. smart shopping   d. natural language

4 .... sensors are used to turn on lights when someone enters the room.

    a. Smartphone   b. Smart car

    c. Smart home lighting system   d. Smart watch

5 The Python Shell is .... when Python is installed.

    a. downloaded separately   b. installed automatically

    c. ignored   d. none of them

2 Put (✓) or (✗):

1. 📖 In City = "Cairo", the data type of the variable City is a string. (   )

2. To implement the project, click on the symbol 🚩.   (   )

3. The design of the structure affects the weight of the robot and its ability to move.   (   )

4. Distance sensors are used in measuring the distance between the robot and surrounding obstacles.   (   )

5. 📖 An ultrasonic sensor is used for non-contact temperature measurement.   (   )

3 Correct the errors related to naming variables using Python in the following:

1. print (Hello World)

....

2. True= "Ahmed"

....

3. IsStudent = "False", where the value of variable is boolean

....

4. price= '100', where the value of variable is integer

....

5. name = Ahmed
   type ("name")

....

Model Exam 5

1 Choose the correct answer:

1 📖 .... artificial intelligence can solve problems that are difficult for humans to solve easily and discover new things we never imagined before.

    a. Narrow   b. General   c. Super   d. Precise

2 To execute the project's steps, use the command .... embedded at the beginning of the code segment.

    a. change x by 10   b. move 10 steps

    c. wait 1 seconds   d. when clicked

3 One of the sensors that are used to measure distance using high-frequency sound waves is ....

    a. ultrasonic sensors   b. laser rangefinders

    c. infrared sensors   d. motion sensors

4 📖 In production lines, robots can perform repetitive tasks accurately and without any delay, which leads to ....

    a. an increased efficiency and productivity

    b. a decreased efficiency and productivity

    c. a lack of product development

    d. a slow production process

5 The sprite in Scratch represents the ....

    a. background   b. object or character

    c. command block   d. File menu

2 Put (✓) or (✗):

1 Variables in programming languages are reserved places in memory to store and save a specific value.   (   )

2 📖 The motors used in robots include electric motors and pneumatic motors.   (   )

3 In the Scratch program, the result of the work or project appears in the Blocks Area.   (   )

4 Pandas is a library used in data science, statistics, and artificial intelligence.   (   )

5 📖 It is not possible to create applications and websites using Python.   (   )

6 📖 Artificial intelligence is a branch of computer science.   (   )

7 📖 Laser rangefinders are accurate because they use laser beams.   (   )

8 📖 The control unit processes the data collected by the sensors and issues commands to the motors.   (   )

9 📖 Matplotlib is a library for data analysis and manipulation. (   )

10 📖 In Scratch, we use the coordinates (x, y) to determine the location of a point on the stage.   (   )

Model Exam 6

1 **Choose the correct answer:**

1 The structure of a robot can be made of materials, such as ....
   a. metals   **b.** plastic   **c.** carbon   **d.** all of them

2 📖 To add a new project, press on ....
   a. Start   **b.** Choose Sprite   **c.** Blocks Area   **d.** Stop

3 The factors that determine the choice of a sensor for a particular application include the ....
   a. brand of the device
   b. color of the device
   c. environment and required accuracy
   d. size of the device

4 In which environment are light sensors useful?

    a. In dark rooms

    b. In places with variable lighting conditions

    c. In underwater environments

    d. In noisy factories

5 The main function of a sensor is to ....

    a. store data

    b. capture environmental changes and convert them into signals

    c. display images

    d. produce sounds

2 Put (✓) or (✗):

1 The variable name must not begin with a letter or an underscore sign (_).

                                                                    (   )

2 📖 In the Scratch program, the Stage Area displays the code blocks.

                                                                     (   )

3 Matplotlib is a Python library used in analyzing data. (   )

4 📖 Artificial intelligence is only used in the video game industry. (   )

5 📖 Python is used in developing web applications, data science, artificial intelligence, machine learning, and game programming. (   )

3 Complete the following sentences:

1 The .... is the "brain" of the robot, processing data from sensors.

2 Laser rangefinders are characterized by their high .... and longer range.

3 .... enables AI to understand and respond to human languages.

4 .... includes algorithms that make a robot smart.

5 The sprites area in Scratch contains the .... used in the project.

Model Exam 7

1 Choose the correct answer:

1 In Scratch, you can save the project from the .... menu.
   a. Edit   b. Home   c. File   d. none of them

2 📖 In the Scratch program, the result of the work or project appears in the ....
   a. Script Area   b. Stage Area   c. Area Blocks   d. Sprites Area

3 The first step in the operation of a sensor is ....
   a. transmitting   b. displaying   c. sensing   d. transduction

4 📖 One of the common applications of sensors is the use of infrared in ....
   a. smartphones   b. remote controls
   c. vacuum cleaners   d. 3D scanning

5 Sensors help robots to ....
   a. teach them new languages
   b. allow them to interact with their environment
   c. increase their size
   d. slow down their operations

2 Put (✓) or (✗):

1 TAHER, Taher, taher, TaheR are 4 names for variables in the Python language.   (   )

2 Python is one of the most difficult programming languages.   (   )

3 📖 Artificial intelligence is only one type.   (   )

4 The horizontal and vertical axes are used to know the current location of the sprite on the platform.   (   )

5 In the Scratch program, students face difficulty in sharing projects with others.   (   )

3 Complete the following sentences:

1 In Python, variable names must begin with a .... or an underscore.

2 Python is an .... language, meaning it translates code line by line.

3 Ultrasonic sensors use high frequency .... waves to measure the distance to an object.

4 Deep learning depends mainly on ....

5 .... is the most advanced type of AI.

Model Exam 8

1 Choose the correct answer:

1 In Scratch, Y=0 represents the .... axis.

   a. horizontal   b. vertical   c. diagonal   d. none of them

2 Laser rangefinders are accurate because they use ....

   a. sound waves   b. visible lights
   c. high-frequency waves   d. laser beams

3 .... are used to avoid obstacles.

   a. Light sensors   b. Sound sensors
   c. Distance sensors   d. Heat sensors

4 Robots use .... to interact with users or other robots.

   a. sensors   b. communication tools
   c. motors   d. power sources

5 In Scratch, X=0 represents the .... axis.

   a. horizontal   b. vertical   c. diagonal   d. none of them

2 Put (✓) or (✗):

1 📖 Python can be integrated with other languages, such as C, C++, and Java. ( )

2 📖 The Scratch program helps the student learn the principles of programming. ( )

3 Robots rely on direct energy sources only and we cannot use batteries or solar cells. ( )

4 The variable name can contain letters (A-Z), numbers, or an underscore sign (_). ( )

5 The location of the sprite on the platform is determined by the value of the horizontal axis X only. ( )

3 Complete the following sentences:

1 Variable names in python can contain ...., ... and ....

2 Python is .... source, meaning it allows everyone to use and develop it.

3 To add a new sprite in Scratch, click on the .... button in the Sprites Area.

4 The file extension for Scratch projects is ....

5 Robots use .... to move their parts, such as robotic arms.

Model Exam 9

1 Choose the correct answer:

1 In Scratch, to set the line thickness, use the .... block.
   a. Set Pen Size to   b. Set Pen Color to
   c. Change Pen Size by   d. none of them

2 .... are commonly used in remote controls.

    a. Ultrasonic sensors   **b.** Infrared sensors

    c. Light sensors   **d.** Motion sensors

3 📖 Python translates a code line by line, which means it is ....

    a. a complex language   **b.** an interpreted language

    c. a closed source   **d.** not integrated

4 The background "Space" in Scratch is chosen by clicking on ....

    a. Choose a Backdrop   **b.** Choose a Sprite

    c. Choose a Sound   **d.** Choose a Motion

5 📖 The file extension for a Scratch project is ....

    a. DOCX   **b.** SB3

    c. BMP   **d.** JPG

2 Put (✓) or (✗):

1 One of the disadvantages of Python is the lack of libraries that you can use.   (   )

2 The sprite name can be modified only once.   (   )

3 The motors used in robots include electric motors and air motors.   (   )

4 Artificial intelligence is a science of computer science.   (   )

5 When naming variables, reserved words in the Python language may be used.   (   )

3 Complete the following sentences:

1 The .... is the main part of the robot that carries all its components and can be made of materials like metals or plastic.

2 Visible light sensors use .... to analyze images.

3 .... is a tool that helps create AI models to recognize images, sounds, and movements.

4 To create movement in Scratch, you use commands from the .... group.

5 To change the direction of a sprite, modify the .... value.

Model Exam 10

1 Choose the correct answer:

1 📖 The official website of Python is ....
a. www.python.org
b. www.python.edu
c. www.pythonlibr.adp
d. www.application.org

2 The first step in the operation of a sensor is ....
a. transmitting
b. displaying
c. sensing
d. transduction

3 Python can be integrated with ....
a. C
b. C++
c. Java
d. all of them

4 The "Go to random position" command is found in the .... group.
a. Motion
b. Sound
c. Control
d. Events

5 The "Wait" command is found in the .... blocks.
a. Motion
b. Looks
c. Events
d. Control

2 Put (✓) or (✗):

1 📖 In Y= 10, the data type of the variable Y is an integer. (   )

2 NumPy is a library used in data science, statistics, and artificial intelligence. (   )

3 The sprites used in the project appear in the Sprites area. (   )

4 Visual Studio is an example of a text editor used for Python programming.

(   )

5 To add a new sprite, click on Choose Sprite.   (   )

3 Match:

Column (A)	Column (B)
1 In Scratch, "Set Pen Size to"	a. are used in classrooms.
2 Boolean is:	b. measure the body temperature without contact.
3 Educational robots	c. changes the thickness of the line.
4 Ultrasonic sensors	d. Is_taher_a_teacher = True
5 Temperature sensors	e. measure distance using sound waves.

1 ....   2 ....   3 ....   4 ....   5 ....

Answers

Model Exam 1

1 1 c 2 c 3 b 4 b 5 b

2 1 ✓ 2 ✗ 3 ✓ 4 ✗ 5 ✗

3 1 Repeat 2 libraries
3 Bluetooth – Wi-Fi
4 green flag 5 Motors

Model Exam 2

1 1 d 2 d 3 c 4 c 5 c

2 1 ✗ 2 ✗ 3 ✓ 4 ✗ 5 ✓

3 4 ➔ 1 ➔ 2 ➔ 3

Model Exam 3

1 1 d 2 b 3 c 4 d 5 b

2 1 ✓ 2 ✗ 3 ✓ 4 ✓ 5 ✓

3 1 Distance sensors 2 GAI
3 Pen down 4 Python
5 print ( )

Model Exam 4

1 1 c 2 a 3 a 4 c 5 b

2 1 ✓ 2 ✓ 3 ✓ 4 ✓ 5 ✗

3 1 print ("Hello World") – The text should be placed between " ".
2 name = "Ahmed" – Reserved words are not used as variable names.
3 is_student= false – Boolean values are not placed between " ".
4 price= 100 – Numeric values are not placed between " ".
5 type (name) – Input of type ( ) should be a variable name without " ".

Model Exam 5

1 1 c 2 d 3 a 4 a 5 b

2 1 ✓ 2 ✓ 3 ✗ 4 ✗ 5 ✗ 6 ✓ 7 ✓ 8 ✓ 9 ✗ 10 ✓

Model Exam 6

1 1 d 2 c 3 c 4 b
5 b

2 1 ✗ 2 ✗ 3 ✗ 4 ✗
5 ✓

3 1 controller 2 accuracy
3 Natural Language Processing
4 Software 5 sprites

Model Exam 7

1 1 c 2 b 3 c 4 b
5 b

2 1 ✓ 2 ✗ 3 ✗ 4 ✓
5 ✗

3 1 letter 2 interpreted
3 sound
4 neural networks
5 SAI

Model Exam 8

1 1 b 2 d 3 c 4 b
5 a

2 1 ✓ 2 ✓ 3 ✗ 4 ✓
5 ✗

3 1 letters – numbers – underscores
2 open 3 Choose Sprite
4 sb3 5 motors

Model Exam 9

1 1 a 2 b 3 b 4 a
5 b

2 1 ✗ 2 ✗ 3 ✓ 4 ✓
5 ✗

3 1 structure
2 digital cameras
3 Teachable Machine
4 Motion 5 direction

Model Exam 10

1 1 a 2 c 3 d 4 a
5 d

2 1 ✓ 2 ✓ 3 ✓ 4 ✓
5 ✓

3 1 c 2 d 3 a 4 e
5 b

كيفية طباعة صفحات معينة من ملف معين

مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9

خطوة 1

خطوة 2 اختيار اسم الطابعة بتاعتك

خطوة 3 كتابة الصفحات المراد طباعتها نكتب رقم 4 ثم نكتب الشرطة دي – ثم نكتب 9

خطوة 4 اختيار نوع الورق

خطوة 5 اختيار A4

خطوة 6